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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,776	10/12/2005	Jakob Gerrit Nijboer	NL 030432	2130
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EXAMINER NWAKAMMA, CHIBUTKE K				
ART UNIT 4178		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,776

Applicant(s)

NIJBOER ET AL.

Examiner

CHIBUIKE K. NWAKAMMA

Art Unit

4178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the label names of Figs. 1-2 as described in the specification, i.e., Fig. 1a, element 9 should be labeled as "Track", Fig. 1a, element 10 should be labeled as "Central Hole", Fig. 1a, element 11 should be labeled as "Storage Medium", Fig. 1b, element 14 should be labeled as "Pre-groove", Fig. 1b, element 15 should be labeled as "Transparent Substrate", Fig. 1b, element 16 should be labeled as "Recording Layer", Fig. 1b, element 17 should be labeled as "Protective Layer",.

Note: The correction should be applied to all Figures. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

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"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities, i.e., the specification contains numerous errors, such as:

- Page 6, Line 15; the phrase "shall contain now address".

Applicant is advised to carefully proofread and eliminate such error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 7 discloses a method to obtain a write-once storage medium. However, in claim 4, the write-once storage medium already exist and a

method is implemented to record data and data structures on the write-once storage medium. A method for obtaining a write-once storage medium is not disclosed in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being unpatentable as over Shishido (US 2001/0026518 A1) in view of Igarashi (Patent No. 5802028).

Claim 1, Shishido discloses a device (Fig. 7, element 30; Page 4, Paragraph 0061-0063) for recording data and data structures on a write-once storage medium (Page 2, Paragraphs 0036-0037; Page 4, Paragraph 0057. A CD-R is a write-once storage medium since recording is performed only once. The packet equates to data structures since it comprises of plurality of data blocks as an access unit.

writing means for recording the data and the data structures (Page 1, Paragraph 0017-Page 2, Paragraph 0018. Recording means records data and data structures, i.e., end position of packet containing data);

controlling means for generating the data structures and controlling the writing means (Page 4, Paragraphs 0062-0064; Fig. 7, elements 36, 37, 42, and 43 are control

means for generating data structures, i.e., paragraph 0057, and controlling recording means);

characterized in that the controlling means are adapted to record the data structures at a predefined temporary location in a reserved area on the write-once storage medium, i.e., CD-R, (see Fig. 11; Page 6, Paragraphs 0101-0104 and Page 4, Paragraph 0062. A reserved area is disclosed as predefined in the Orange Book Specification. Therefore, the controlling means adapts to record data structures at a predefined temporary location by temporarily storing data transmitted from a host interface and transferring data to a host computer) and

to finalize the write-once storage medium by recording the data structures at a predefined fixed location as defined for a rewritable storage medium (Page 3, Paragraph 0047-Page 4, Paragraph 0059. Fig. 5 discloses a structure of an optical medium representing a write-once, i.e., CD-R, and a rewritable, i.e., CD-RW. Therefore, a position and/or location such as the program area, read-out area etc. as defined in the optical medium corresponds or is the same for both the CD-R and CD-RW. Data structures are recorded on packet basis at a predefined/predetermined fixed-length data block via fixed-length packet write method. So, a finalizing process of the write-once storage medium, i.e., CD-R, is met).

Shishido does not disclose data structures comprising space bitmap and defect management structure.

Igarashi discloses data structures comprising space bitmap and defect management structure (Col. 10, lines 15-34; Col. 8, lines 25-48 discloses of a space bit map and a defect management structure, i.e., defective allocation block).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shishido with the teachings of Igarashi to expressly disclose data structures comprising space bitmap and defect management structure, so, to record beforehand, prescribed data at other sectors in order to record data at sectors for a part of the cluster (Igarashi; Col. 8, lines 17-20).

Claim 4, Shishido discloses a method of recording data and data structures on a write-once storage medium, i.e., CD-R, (Page 4, Paragraph 0061-0063, Paragraphs 0036-0037. A CD-R is a write-once storage medium since recording is performed only once. The packet equates to data structures since it comprises of plurality of data blocks as an access unit. A data block is a data structure that embodies one or more elements), the method comprising step of:

recording the data (Page 4, Paragraphs 0060-0067; Fig. 7, element 30 is a recording apparatus that records data via the various elements);
characterized by steps of:

recording the data structures at a predefined temporary location in a reserved area on the write-once storage medium, i.e., CD-R, (see Fig. 11; Page 6, Paragraphs 0101-0104 and Page 4, Paragraph 0062. A reserved area is disclosed as predefined in

the Orange Book Specification. Therefore, the controlling means adapts to record data structures at a predefined temporary location by temporarily storing data transmitted from a host interface and transferring data to a host computer);

finalizing the write-once storage medium by recording the data structures at a predefined fixed location as defined for a rewritable storage medium (Page 3, Paragraph 0047-Page 4, Paragraph 0059. Fig. 5 discloses a structure of an optical medium representing a write-once, i.e., CD-R, and a rewritable, i.e., CD-RW. Therefore, a position and/or location such as the program area, read-out area etc. as defined in the optical medium corresponds or is the same for both the CD-R and CD-RW. Data structures are recorded on packet basis at a predefined/predetermined fixed-length data block via fixed-length packet write method. So, a finalizing process of the write-once storage medium, i.e., CD-R, is accomplished).

Shishido does not disclose data structures comprising space bitmap and defect management structure.

Igarashi discloses data structures comprising space bitmap and defect management structure (Col. 10, lines 15-34; Col. 8, lines 25-48 discloses of a space bit map and a defect management structure, i.e., defective allocation block).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shishido with the teachings of Igarashi to expressly disclose data structures comprising space bitmap and defect management structure, so, to record beforehand, prescribed data at other sectors in order to record data at sectors for a part of the cluster (Igarashi; Col. 8, lines 17-20).

Claim 8, Shishido discloses a computer program product (see Figs. 8-10) for recording data and data structures on a write-once storage medium, i.e., CD-R, (Page 4, Paragraph 0061-0063, Paragraphs 0036-0037. A CD-R is a write-once storage medium since recording is performed only once. The packet equates to data structures since it comprises of plurality of data blocks as an access unit. A data block is a data structure that embodies one or more elements),

Shishido does not disclose data structures comprising space bitmap and defect management structure.

Igarashi discloses data structures comprising space bitmap and defect management structure (Col. 10, lines 15-34; Col. 8, lines 25-48 discloses of a space bit map and a defect management structure, i.e., defective allocation block).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shishido with the teachings of Igarashi to expressly disclose data structures comprising space bitmap and defect management structure, so, to record beforehand, prescribed data at other sectors in order to record data at sectors for a part of the cluster (Igarashi; Col. 8, lines 17-20).

Claim 2, Shishido in view of Igarashi further discloses a device (Shishido; Fig. 7, element 30; Page 4, Paragraph 0061; Page 2, Paragraphs 0034-0037) as claimed in claim 1,

characterized in that the controlling means (Shishido; Page 4, Paragraphs 0062-0064; Fig. 7, elements 36, 37, 42, and 43 are control means) are adapted to finalize the write-once, i.e., CD-R, storage medium (Shishido; Page 3, Paragraph 0047-Page 4, Paragraph 0059. Fig. 5 discloses a structure of an optical medium representing a write-once, i.e., CD-R, and a rewritable, i.e., CD-RW. Therefore, a position and/or location such as the program area, read-out area etc. as defined in the optical medium corresponds or is the same for both the CD-R and CD-RW. Data structures are recorded on packet basis at a predefined/predetermined fixed-length data block via fixed-length packet write method. Therefore, a finalizing process of the write-once storage medium, i.e., CD-R, is met) by recording dummy data in all free parts of the reserved area (Igarashi; Col. 8, lines 57-67 discloses of recording dummy data at logical blocks; Col. 10, lines 35-39 discloses of reserved area, i.e., a region that has been allocated for recording data but data has not yet actually been recorded).

Claim 3, Shishido in view of Igarashi further discloses a device (Shishido; Fig. 7, element 30; Page 4, Paragraph 0061; Page 2, Paragraphs 0034-0037) as claimed in claim 1,

characterized in that the controlling means (Shishido; Page 4, Paragraphs 0062-0066; Fig. 7, elements 36, 37, 42, and 43 are controlling means) are adapted to read the data structures from the predefined temporary location and to record the data structures at the predefined fixed location (Shishido; see Fig. 11; Page 6, Paragraphs 0101-0104 and Page 4, Paragraph 0062. A reserved area is disclosed as predefined in

the Orange Book Specification. Therefore, the controlling means adapts to read/record data structures at a predefined fixed location, i.e., the reserved area is a predefined fixed location at bytes 13-23, 29-39, 45-55, and 61-71. Also, Page 3, Paragraph 0047-Page 4, Paragraph 0059. Fig. 5 discloses a structure of an optical medium representing a write-once, i.e., CD-R, and a rewritable, i.e., CD-RW. Therefore, a position and/or location such as the program area, read-out area etc. as defined in the optical medium corresponds or is the same for both the CD-R and CD-RW. Data structures are recorded on packet basis at a predefined/predetermined fixed-length data block via fixed-length packet write method. Therefore, reproducing/recording data structures at fixed location is accomplished).

Claim 5, Shishido in view of Igarashi further discloses a method as claimed in claim 4, characterized by a step of:

recording dummy data in all free parts of the reserved area (Igarashi; Col. 8, lines 57-67 discloses of recording dummy data at logical blocks; Col. 10, lines 35-39 discloses of reserved area, i.e., a region that has been allocated for recording data but data has not yet actually been recorded).

Claim 6, Shishido in view of Igarashi further discloses a method as claimed in claim 4, characterized by a step of:

reading the data structures from the predefined temporary location (Shishido; Page 4, Paragraphs 0062-0066; Fig. 7, elements 36, 37, 42, and 43

are controlling means. Also see, see Fig. 11; Page 6, Paragraphs 0101-0104 and Page 4, Paragraph 0062. A reserved area is disclosed as predefined in the Orange Book Specification. Therefore, the controlling means adapts to read/record data structures at a predefined fixed location, i.e., the reserved area is a predefined fixed location at bytes 13-23, 29-39, 45-55, and 61-71. Also, Page 3, Paragraph 0047-Page 4, Paragraph 0059. Fig. 5 discloses a structure of an optical medium representing a write-once, i.e., CD-R, and a rewritable, i.e., CD-RW. Therefore, a position and/or location such as the program area, read-out area etc. as defined in the optical medium corresponds or is the same for both the CD-R and CD-RW. Data structures are recorded on packet basis at a predefined/predetermined fixed-length data block via fixed-length packet write method. Therefore, reproducing/recording data structures at fixed location is accomplished).

Claim 7, Shishido in view of Igarashi further discloses a write-once storage medium (Shishido; Page 2, Paragraph 0037; Page 1, Paragraphs 0016-0017) obtained by a method as claimed in claim 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chibuike K. Nwakamma whose telephone number is 571-270-3458. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on 5712727305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/31/2007
Chibuike Nwakamma

/Hai Tran/

Supervisory Patent Examiner, Art Unit 4178